

# Developing Smart Tags

Jeff Reynar & Mike Ammerlaan  
Program Managers  
Office  
Microsoft Corporation



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# Technical Airlift

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# What is a Smart Tag?

- An XML label and optional metadata applied to a string
  - MSFT is a *stock ticker symbol*
  - Kid A is an *album*
    - Metadata: band="Radiohead"



# Smart Tag Savvy Apps.

- Word
- Outlook
  - HTML e-mail (default for Office 10)
- Excel
  - Off by default
- Internet Explorer
  - Actions only in Office 10
  - Recognition & actions in Whistler/IE6

# E-mail Demo

- Smart tags work when
  - Composing mail with Wordmail (default)
  - Reading e-mail containing smart tags

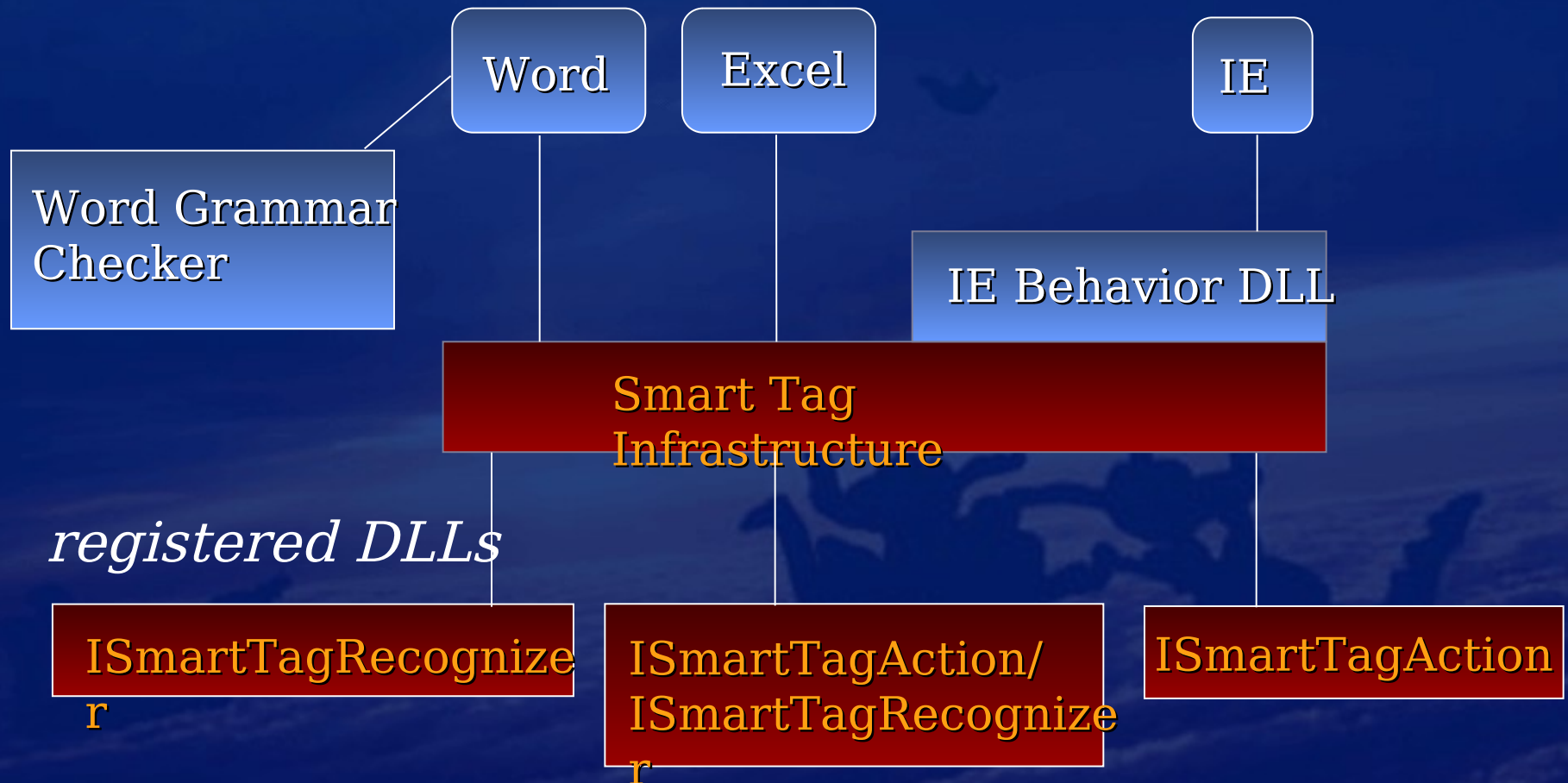




# Smart Tags Are Extensible

- Third parties can
  - Define their own types (e.g. case citations)
    - Build their own recognizers
    - Build their own actions
  - Extend existing Office types
    - Build actions for people, places, etc.

# Smart Tag Architecture



# Labeling Your Own Data

- Create xml list for list recognizer
- Code against smart tag APIs in C++/VB
  - Full power of COM
  - Local database lookup
  - Web data lookup
  - Custom pattern matching



# Building Your Own Actions

- Define URL action in XML file
- Code against smart tag APIs in C++/VB
  - Full power of COM
  - Actions get Object Model pointer
    - Can modify document

# Distributing Smart Tags

- Requires client-side code
- Special metadata: downloadURL
  - Enables “Check for new actions...”
  - Works in documents, web pages & mail



# Stock Ticker Demo

- Smart tag list recognition & actions at work



# Smart Tag Lists

- Alternate method to create recognizer and action without code
- Simple, list based recognizer
  - Case sensitive/insensitive
  - Scales to a few thousand terms
- HTTP Actions
  - Use smart tag value as parameters
- Updateability
  - Downloads replacement XML file from website

# Sample MOSTL File

- Header section
  - Smart Tag List Name, Description, URL
  - LCID

```
<FL:smarntaglist xmlns:FL="urn:schemas-microsoft-  
com:smarttags:list">  
  <FL:name>Manufacturing Employee Names</FL:name>  
  <FL:lcid>1033</FL:lcid>  
  <FL:description>  
    A list of the e-mail aliases of employees that  
    work in manufacturing at A. Datum Corporation.  
  </FL:description>  
  <FL:moreinfourl>  
    http://www.somefoobarplace.com/moreinfo  
  </FL:moreinfourl>
```

# Sample MOSTL File, Recognition

- Define smart tag type
  - Termlist is a comma-seperated list
  - In quotes for case sensitive

```
<FL:smarttag type="urn:schemas-adatum-  
com:internal#employees">  
  
  <FL:terms>  
    <FL:termlist>  
      jimdo, erika, sueb, janec, jwilson,  
      kaitlynd, sreyes, tbean, kylet,  
      melanier, mcarr, jorgeg, billjo  
    </FL:termlist>  
  </FL:terms>  
  ...
```



# Sample MOSTL File, Actions

- Define smart tag type actions
  - Termlist is a comma-seperated list
  - In quotes for case sensitive

```
...  
<FL:caption>A. Datum Corporation</FL:caption>  
<FL:actions>  
    <FL:action id="EmployeeInfo">  
        <FL:caption>  
            &A. Datum Web Address Book  
        </FL:caption>  
        <FL:url>  
http://www.somefoobarplace.com/home.asp?String={TEXT}  
        </FL:url>  
    </FL:action>  
</FL:actions>
```

# Raid Demo

- Automate tasks involving applications other than Office
- Interaction with document through object model
- Check for new actions...
- Every LORG has data analogous to RAID bugs
  - Chemical formulae, part numbers, customer names, product names, etc.

# SimpleTerm Demo

- Easy to build and update a smart tag recognizer
- Easy to build smart tag actions
- Complete flexibility—if you can do it with COM, you can do it in a recognizer or action

# Database-Driven Recognition and Actions

- Simple VB Sample in SDK
- Majority of code: Loading XML configuration
- Uses ADO to connect to databases on start
- Uses Scripting.Dictionary
  - Cache terms
  - Perform quick lookups
- Database driven actions

# Moving Forward

- Microsoft applications and content sites need Smart Tags!
  - Drives cross-application scenarios & need for Office 10
  - It's "the focus" for Office 10 launch
- Office 10 is looking for partners
  - ISVs, content sites, corporate scenarios
  - Contact stteam



# Getting More Information

- Join Smart Tag Discussion alias
  - [smarttag](#)
- Download the Smart Tag SDK  
<http://officemarketing/developer/>
- Check out the Office Developer Center  
<http://msdn.microsoft.com/office>
- Talk to ODC site manager in the labs



The background of the slide is a blue-tinted photograph of several people skydiving. They are in various poses, some with arms outstretched, against a backdrop of white clouds and a clear sky. The overall tone is dynamic and adventurous.

# Software For The Agile Enterprise

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